

【ABSTRACT】

The present invention relates to furancarbonylguanidine derivatives, a preparation method thereof and a pharmaceutical composition comprising the same.

Furancarbonylguanidine derivatives of the present invention inhibit NHE-1 (sodium-hydrogen exchanger isoform 1), which helps recovery of heart function damaged from ischemia/reperfusion and decreases myocardial infarction rate, indicating that they have protective effect on myocardial cells. Thus, furancarbonylguanidine derivatives of the present invention can be effectively used for the prevention and the treatment of ischemic heart diseases such as myocardial infarction, arrhythmia, angina pectoris, etc, and also a promising candidate for a heart protecting agent applied to reperfusion therapy including thrombolytics or cardiac surgery including coronary artery bypass graft, percutaneous transluminal coronary angioplasty, etc.